

## Claims

- [c1] 1. A method to assess impact of future changes on a current model comprising the steps of:
- (A) isolating a period of criticality for a current model;
  - (B) identifying a number of impacting change factors of the period of criticality;
  - (C) determining a risk assessment value for each of the number of impacting change factors; and
  - (D) prioritizing the number of impacting change factors based upon each risk assessment value.
- [c2] 2. The method of claim 1 further comprising the step of periodically evaluating the risk assessment value for each of the number of impacting change factors and re-prioritizing the number of impacting change factors based on the periodic evaluation of the risk assessment values.
- [c3] 3. The method of claim 1 further comprising the step of developing an action plan configured to either one of minimizing or eliminating an effect of an impacting change factor on the current model.
- [c4] 4. The method of claim 3 further comprising the step of assigning a projected target date for either minimizing or eliminating an effect of an impacting change factor on the current model.
- [c5] 5. The method of claim 1 wherein the step of prioritizing the number of impacting change factors based upon each risk assessment value further comprises the step of ranking the number of impacting change factors in a descending arrangement based upon the risk assessment values and further comprising the step of addressing the number of impacting change factors in turn based upon the descending arrangement.
- [c6] 6. The method of claim 5 further comprising the step of repeating steps (C) and (D) of claim 1 after the number of impacting change factors have been addressed.

- [c7] 7. The method of claim 1 wherein the step of determining a risk assessment value for each of the number of impacting change factors includes the steps of:
- determining a severity value for each impacting change factor;
  - estimating a likelihood of occurrence for each impacting change factor; and
  - determining a detectability coefficient for each impacting change factor.
- [c8] 8. The method of claim 7 further comprising the step of summing the severity value, the likelihood of occurrence, and the detectability coefficient for an impacting change factor to derive the risk assessment value for the impacting change factor.
- [c9] 9. The method of claim 1 further comprising the step of eliminating a need to redesign the current model after implementation of the current model.
- [c10] 10. A method to address foreseeable change risks comprising the steps of:
- (A) identifying a number of foreseeable risks for a critical time window;
  - (B) determining an impact of each foreseeable risk for viability of a proposed implementation;
  - (C) developing an action plan to negate the impact of each foreseeable risk to the viability of the proposed implementation;
  - (D) minimizing the impact of each foreseeable risk in accordance with the action plan; and
  - (E) re-determining the impact of each foreseeable risk after completion of the step of minimizing the impact of each foreseeable risk.
- [c11] 11. The method of claim 10 wherein the step of determining an impact further comprises the step of determining a change risk prioritization number (RPN).
- [c12] 12. The method of claim 11 further comprising the step of multiplying a severity factor, a probability factor, and a detectability factor.
- [c13] 13. The method of claim 11 further comprising the step of determining a foreseeable change risk having the highest RPN and organizing each

additional foreseeable change risk in descending order based on the RPN corresponding to each additional foreseeable change risk.

- [c14] 14. The method of claim 10 further comprising the step of repeating steps (B)–(E) until an acceptable RPN for each foreseeable change risk has been obtained.
- [c15] 15. The method of claim 14 further comprising the step of executing the proposed implementation once an acceptable RPN for each foreseeable change risk has been obtained.
- [c16] 16. A computer program to determine an effect of a foreseeable event on a present design having a set of instructions that when executed by one or more computers causes the one or more computers to:
- identify a plurality of foreseeable events each having an effect on a present design;
  - determine a severity factor for each foreseeable event;
  - determine a probability factor for each foreseeable event;
  - determine a detectability factor for each foreseeable event; and
  - determine a risk prioritization number (RPN) for each foreseeable event.
- [c17] 17. The computer program of claim 16 wherein the set of instructions further causes the one or more computers to rank each RPN from a high change risk state to a low change risk state for the plurality of foreseeable events.
- [c18] 18. The computer program of claim 17 wherein the foreseeable event with the highest risk state represents the foreseeable event posing a most significant change risk to present design success.
- [c19] 19. The computer program of claim 16 wherein the RPN for each foreseeable event is a multiplication of the severity factor, probability factor, and detectability factor.
- [c20] 20. The computer program of claim 16 wherein the set of instructions

further causes the one or more computers to identify an individual responsible for addressing a foreseeable event and further causes the one or more computers to identify an addressability date for each foreseeable event, wherein the addressability date represents a target date for amending the present design to negate the effect of the foreseeable event on the present design.

- [c21] 21. The computer program of claim 16 wherein the computer program further causes the one or more computer to determine the RPN for each foreseeable event for a critical time window.
- [c22] 22. The computer program of claim 16 wherein the plurality of foreseeable events are selectable from a number of event categories including competitive offerings, supply chain, interface to other systems, resources, customer critical-to-quality (CTQ) issues, and business CTQ issues.
- [c23] 23. The computer program of claim 16 wherein the computer program further causes the one or more computers to determine an RPN threshold index and further causes the one or more computers to identify the future events having an RPN greater than the RPN threshold index.